



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| PPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------------------------|-----------------|----------------------|-------------------------|------------------|
| 09/739,817 | 12/20/2000 | Kentaro Miyano | P20402 | 4059 |
| 7055 | 7590 02/22/2006 | . ⁴ | EXAMINER | |
| GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE | | | LEE, JOHN J | |
| RESTON, VA | | | ART UNIT | PAPER NUMBER |
| | | | 2684 | |
| | | | DATE MAILED: 02/22/2000 | 6 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| Application No. | Applicant(s) | |
|-----------------|---------------|--|
| 09/739,817 | MIYANO ET AL. | |
| Examiner | Art Unit | |
| JOHN J. LEE | 2684 | |

Advisory Action Before the Filing of an Appeal Brief --The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 05 January 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. X The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: a) The period for reply expires 2 months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL 2. The Notice of Appeal was filed on __ ____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below); (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: _____. (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): 6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. Tor purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: 40 and 41. Claim(s) objected to: None. Claim(s) rejected: 36-39. Claim(s) withdrawn from consideration: AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. 🔯 The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet. 12. Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). 13. Other: See Continuation Sheet.

U.S. Patent and Trademark Office

Continuation of 11. does NOT place the application in condition for allowance because: The applicant's arguments received on 1/5/2006 have been carefully considered but they are not persuasive because the combined teaching of all the cited references as set forth in the previous final rejection reads on all the claims.

In this case, for example, The Applicant argues that the combination of Shapira (US Patent number 6,697,641) and Dean (US Patent number 6,091,970) do not teach the claimed limitation "multiplies transmission signals for one of said first linear polarization antenna element or said second linear polarization antenna element by a reference signal to invert a polarity of the transmission signal corresponding to said reference signal". However, Shapira teaches transmitting antenna applied in RF, IF or baseband that transforms the weights according to the different polarization of the transmitting antennas with appropriate transmission channels and outgoing signal to each of the orthogonal polarized transmitting antennas (multiple carrier linear power amplifier is located at the transmitting antennas) incorporating an interleaver in their digital modulation and coding (see column 12, lines 40 - 65, Fig. 5, 10, and column 14, lines 11 - 39). Also, Dean teaches a base station has two polarization antennas that set of respectively orthogonally polarizws antennas for accessing through horizontal and vertical polarization ports and the two polarization orientations may be inverted by reference signals (column 4, lines 29 - column 5, lines 34 and Fig. 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Shapira system as taught by Dean, provide the motivation to enhance function of polarization antennas for improving signal transmitting and receiving in wireless communication system.

Continuation of 13. Other: Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Lee whose telephone number is (571) 272-7880.

EDWARD F. URBAN
SUPERVISORY PATENT EXAMINENTECHNOLOGY CENTER 2600